NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF MARINE SAFETY
WASHINGTON, D.C.

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SELENDANG AYU :
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INTERVIEW OF 3RD ENGINEER :
MUTHA BALAUBRAMANIAM :
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An interview in the above entitled matter was held on Wednesday, December 15, 2004, commencing at 3:53 p.m., before:

BRIAN CURTIS, NTSB
DARRELL HOWELLS, USCG

P R O C E E D I N G S

MR. CURTIS: Good afternoon, it's December 15th at about 15:55 hours, and we're here to interview Mr. Mutha --

THIRD ENGINEER BALAUBRAMANIAM: Mutha Balaubramaniam.

MR. CURTIS: -- regarding the Selendang Ayu grounding, and this is Mutha's second interview, and we'll just firs, before we get started, we'll identify who is in the interview process. Myself, Brian Curtis, for the NTSB, a marine engineering accident investigator.

MR. HOWELLS: Darrell Howells, U.S. Coast Guard. I'm a marine inspector.

THIRD ENGINEER BALAUBRAMANIAM: I'm Mutha Balaubramaniam, third engineer, Selendang Ayu.

MR. CURTIS: Thank you, Mutha, and we'll get started. This is a follow-up to his interview the other day, so, some of these questions jump around a lot. You had a problem with number three liner. Did you have all the parts to repair the engine? To repair the liner problem?

THIRD ENGINEER BALAUBRAMANIAM: Liner, star liner was there.

MR. CURTIS: Okay.

THIRD ENGINEER BALAUBRAMANIAM: As far as I know, liner, star liner was there.

MR. CURTIS: Which engineer is responsible for the

main engine maintenance?

THIRD ENGINEER BALAUBRAMANIAM: Second engineer.

MR. CURTIS: Second engineer? So, he'd be responsible for the spare parts for that as well?

THIRD ENGINEER BALAUBRAMANIAM: Yes, spare parts, maintenance, office.

MR. CURTIS: Spare parts, is that part of your BV worker's program too, the maintenance and the spare parts, that's all in the same program?

THIRD ENGINEER BALAUBRAMANIAM: Maintenance comes in -- (indiscernible) forecast will be there in BV worker, and spares will be in the other.

MR. CURTIS: There's a question regarding the day of the 6th, when you had the problem with the liner. You shut the engine down? Did they use any light fuel to shut it down, or light it off that day? Do you know?

THIRD ENGINEER BALAUBRAMANIAM: I'm not sure, but when we were isolating the fuel injection pump, I asked second engineer whether it is under the same door or not. He said it is the same door, diesel oil.

MR. CURTIS: So, look to diesel oil? So, when would you normally -- would you normally shut it down on heavy oil, or light, or diesel oil?

THIRD ENGINEER BALAUBRAMANIAM: There is no measurement. It depends on fuel line systems, or -- and

(indiscernible) did work on maintenance on (indiscernible) engine, we stop it in heavy oil. There is a question (indiscernible) so we normally stop in heavy oil.

MR. CURTIS: And start it on heavy oil?

THIRD ENGINEER BALAUBRAMANIAM: Heavy oil.

MR. CURTIS: This engine, did you ever see any problems starting, or was it generally a good starting engine?

THIRD ENGINEER BALAUBRAMANIAM: Generally, good starting engine.

MR. CURTIS: Was this the first time you'd seen a starting problem with it?

THIRD ENGINEER BALAUBRAMANIAM: Since I have -- I spent one month. I had one (indiscernible) from China, and one maneuvering in Seattle. Not face any problem in starting.

MR. CURTIS: To start the engine, do they use a checklist?

THIRD ENGINEER BALAUBRAMANIAM: Yes.

MR. CURTIS: Was that an ISM checklist, or a manual checklist?

THIRD ENGINEER BALAUBRAMANIAM: It's an ISM checklist.

MR. CURTIS: Now, if you start it by the checklist, do you have to log that you started it by the

checklist, or save the checklist, and file it somewhere?

THIRD ENGINEER BALAUBRAMANIAM: No, it is like a notice board, it is clipped onto that. Second engineer conforms to each and everything and he makes an X marker there. Normal, like (indiscernible).

MR. CURTIS: The liner failing, have you ever seen a liner failure like this? What do you think may cause a liner to fail like that? Any ideas?

THIRD ENGINEER BALAUBRAMANIAM: No.

MR. CURTIS: Did the chief or the second speak to you about that? What may have caused the liner to fail?

THIRD ENGINEER BALAUBRAMANIAM: No, my part of -- where I was included in the discussion was to isolation, how to isolate. We were (indiscernible). The cause of the liner (indiscernible) was not discussed with me.

MR. CURTIS: When they first went to isolate number three, they went through seven steps, seven, eight steps, whatever. Those steps were in the manufacturers manual?

THIRD ENGINEER BALAUBRAMANIAM: Yes, I do see that.

MR. CURTIS: Then, when that didn't work, you undid the steps?

THIRD ENGINEER BALAUBRAMANIAM: We undid the

steps, and worked back to normal, only isolating the fuel injection problem.

MR. CURTIS: On this engine, could you isolate the jacket water to each cylinder?

THIRD ENGINEER BALAUBRAMANIAM: Yes.

MR. CURTIS: The vessel, does it have a grounding drill, one of the emergency drills, to cover groundings?

THIRD ENGINEER BALAUBRAMANIAM: Drills are normally conducted with (indiscernible) and I never took (indiscernible) aboard the grounding drill, but there are a few checklists and (indiscernible).

MR. CURTIS: For groundings?

THIRD ENGINEER BALAUBRAMANIAM: For grounding.

MR. CURTIS: In a grounding, do you know what your duties would be? In the drill?

THIRD ENGINEER BALAUBRAMANIAM: My duties will be to assist second engineer in the engine room.

MR. CURTIS: Moving along to later on. You went to the number six unit, it had broken rings. Was there any discussion what may have broken the rings?

THIRD ENGINEER BALAUBRAMANIAM: No, it (indiscernible).

MR. CURTIS: Do you have any opinion, yourself, what may have caused the rings to break?

THIRD ENGINEER BALAUBRAMANIAM: No.

MR. CURTIS: Unmanned engine room. Do you recall when you started standing a watch previous to the 6th, do you recall what day you started standing a watch?

THIRD ENGINEER BALAUBRAMANIAM: Yes, 6th to early morning, 12:00 to 4:00, I kept a watch

MR. CURTIS: Had you been standing a watch for several days, or was that the 6th --

THIRD ENGINEER BALAUBRAMANIAM: It was an interrupted watch. Sometime I change back to (indiscernible).

MR. CURTIS: If it's unmanned, who would stay in the engine room during the times when the engine room is unmanned? Would you leave somebody down there?

THIRD ENGINEER BALAUBRAMANIAM: Normally, any -- right from the beginning, I'm saying that all of kept keeping watch in the engine room, and the engineer wanting 8:00 to 5:00, is the day work. After that he checks around then stay in the cabin, and nighttime, 8:00 to 9:00, we come down, and take the (indiscernible).

MR. CURTIS: They have a selector to -- you can call the engineer's room?

THIRD ENGINEER BALAUBRAMANIAM: No, he normally attends (indiscernible) he calls and informs us.

MR. CURTIS: On the ship, do you use a radio? Could he call in with a radio, like a VHF, UHF radio or

something?

THIRD ENGINEER BALAUBRAMANIAM: No, on the telephone.

MR. CURTIS: Telephone, okay. I have some questions about the engine shut down trips. In a previous interview, we heard that on the bridge, there may have been an automatic slow down alarm going off. What would trigger an automatic slow down alarm?

THIRD ENGINEER BALAUBRAMANIAM: Low body pressure, jacket pulling water, or high temperature, exhaust -- difference between the units' exhaust temperature, and high, the (indiscernible) temperature. So, I can say acting normal.

MR. CURTIS: If you get one of those alarms that triggers an auto slow down alarm --

THIRD ENGINEER BALAUBRAMANIAM: Yeah.

MR. CURTIS: What happens to the engines when that alarm goes off, the auto slow down alarm? Do they slow down?

THIRD ENGINEER BALAUBRAMANIAM: When the alarm comes, it'll slow down. After that we have to (indiscernible) the alarm, whatever the reason is for, and then we are going gracefully.

MR. CURTIS: Are you aware that -- had you heard that day that there was an auto slow down alarm that had

gone off?

THIRD ENGINEER BALAUBRAMANIAM: The 6th?

MR. CURTIS: Yes.

THIRD ENGINEER BALAUBRAMANIAM: December 6th, no.

MR. CURTIS: Did anybody -- were you aware of any alarms that went off on the engine that morning?

THIRD ENGINEER BALAUBRAMANIAM: No.

MR. CURTIS: Is it -- is there -- there's a logger or printer that would print all your alarms out. Did you have one of those in the engine room?

THIRD ENGINEER BALAUBRAMANIAM: Yes.

MR. CURTIS: And you didn't notice anything on that?

THIRD ENGINEER BALAUBRAMANIAM: No.

MR. CURTIS: With these engines, have you seen any major -- you weren't on that long, any big engine problems with these engines in the time that you were on the main engine? Did you see any big -- did you have any big engine problems in the time that you were on, aside from this one?

THIRD ENGINEER BALAUBRAMANIAM: Aside from this one, no. The boiler (indiscernible) I think, from China to Seattle.

MR. CURTIS: The morning of the 6th, the engine shut down at what time?

THIRD ENGINEER BALAUBRAMANIAM: Time exactly, I

don't know. I reached about -- it is -- I think it has would've been 9:00 to 10:00 maybe. I raised about 10:15 to 10:20 that time I guess.

MR. CURTIS: I'm trying to get at these conflicting reports. Did the engine shut itself off, or did the chief shut the engine off? Do you have any idea if it shut itself off, or was it actually shut off by a human?

THIRD ENGINEER BALAUBRAMANIAM: When I went to engine room, engine was already stopped, but in between the work, I asked second engineer that it was you shut down or engine slowed on, or whatever? He told (indiscernible) shut it down, because that time they were there in control room.

MR. CURTIS: That they shut it down?

THIRD ENGINEER BALAUBRAMANIAM: Yeah, I asked this question for my personal interest.

MR. CURTIS: Okay.

THIRD ENGINEER BALAUBRAMANIAM: I asked whether -- what happened actually? Is it you brought it to stop, or what happened? He told this.

MR. CURTIS: That would be the chief and the second, one of those two?

THIRD ENGINEER BALAUBRAMANIAM: One of who? I don't know who stopped it. I did not ask. Not particular about it.

MR. CURTIS: Okay, but it did --

THIRD ENGINEER BALAUBRAMANIAM: I wanted to know from second engineer, he told me (indiscernible) stopped it.

MR. CURTIS: Any idea why -- your own opinion why the rings may have been broken in the 6th?

THIRD ENGINEER BALAUBRAMANIAM: The normal running engine (indiscernible) material failure is the first one I could -- was it in the parameters they're looking this good, but after I left (indiscernible) and it was a quite a long time, it was turning, I don't know what was the (indiscernible) of that time, or what maybe the (indiscernible).

MR. CURTIS: What about during the decarbonization in Seattle, on number one cylinder? Did that cylinder have a lot of carbon in it?

THIRD ENGINEER BALAUBRAMANIAM: The liners were okay from inside. As usual, like small time (indiscernible) no scratches and no marks (indiscernible).

MR. CURTIS: How were the rings?

THIRD ENGINEER BALAUBRAMANIAM: Rings on the little (indiscernible).

MR. CURTIS: Generally, not bad?

THIRD ENGINEER BALAUBRAMANIAM: Generally, all were (indiscernible) cylinders. How it looks like, maybe it's (indiscernible) on rings.

MR. CURTIS: How many hours does each cylinder go

between decarbonization?

THIRD ENGINEER BALAUBRAMANIAM: Approximately 6,000. Exactly, I don't know. See a second engine in (indiscernible) --

MR. CURTIS: On each engine, on each cylinder unit? Any problems with your sea water strainers getting clogged up frequently? Did you have that problem on the ship?

THIRD ENGINEER BALAUBRAMANIAM: On main sea water, no. Sometimes auxiliary engine sea water strainer, we check for any serious or a little bit (indiscernible).

MR. CURTIS: Never an issue? I guess I'm going to turn the questioning over to Mr. Howells at this time.

THIRD ENGINEER BALAUBRAMANIAM: Okay.

MR. HOWELLS: I'm sorry, did you say you stood the 12:00 to 4:00 or the 4:00 to 8:00?

THIRD ENGINEER BALAUBRAMANIAM: 12:00 to 4:00.

MR. HOWELLS: 12:00 to 4:00, okay. So, were you in the engine room the midnight of the 5th until 4:00 a.m. in the morning of the 6th, or were you in the cabin?

THIRD ENGINEER BALAUBRAMANIAM: In the cabin. My watch, last watch, early morning, it is 001 to 0400.

MR. HOWELLS: Okay.

THIRD ENGINEER BALAUBRAMANIAM: Second engineer waved to me. He does (indiscernible) watch. I was talking

to (indiscernible) we take and after that I got relieved. Then I take rest. 8:00 p.m., (indiscernible) the watch. I get a call or sometime I wake up, 11 o'clock, I'm having a meal and (indiscernible) 15 minutes before 12:00, I go to. On that day I was sleeping. I got a call from chief engineer (indiscernible).

MR. HOWELLS: And that call was about what time again?

THIRD ENGINEER BALAUBRAMANIAM: About 10:15.

MR. HOWELLS: The chief called you about 10:15, which was earlier than when you normally get up (indiscernible) as you had the mid watch. Did you get to eat a meal then, or did you go down, and just start working?

THIRD ENGINEER BALAUBRAMANIAM: I just -- straight up, straight up.

MR. HOWELLS: And then you stayed working?

THIRD ENGINEER BALAUBRAMANIAM: Yeah.

MR. HOWELLS: For about how long?

THIRD ENGINEER BALAUBRAMANIAM: I don't remember, but second engineer send me (indiscernible).

MR. HOWELLS: What time is lunch on your ship?

THIRD ENGINEER BALAUBRAMANIAM: It is 12:00 to 1:00.

MR. HOWELLS: 12:00 to 1:00?

THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible)

work then lunch is kept there.

MR. HOWELLS: Is this safe to say that the chief woke you up around 10:15? You go up, you went straight to the engine room? You worked and then he cut you loose, let you go, so you could get lunch before they stopped serving at 1:00?

THIRD ENGINEER BALAUBRAMANIAM: No, no. It was not at 12:00 to 1:00. It was slightly after.

MR. HOWELLS: So, a little bit after 1 o'clock?

THIRD ENGINEER BALAUBRAMANIAM: Yeah.

MR. HOWELLS: Then, after you had your meal, you came back to the engine room?

THIRD ENGINEER BALAUBRAMANIAM: No.

MR. HOWELLS: On a normal day, when you're getting ready to leave, what is your responsibility when the ship is getting ready to leave? Who starts the engine? Was that the chief and the second?

THIRD ENGINEER BALAUBRAMANIAM: Chief engineer and second engineer in control room.

MR. HOWELLS: Where are you?

THIRD ENGINEER BALAUBRAMANIAM: I'll be on top platform.

MR. HOWELLS: Top platform, okay, and what is your responsibility?

THIRD ENGINEER BALAUBRAMANIAM: My responsibility

is when open -- when engine has to let to -- for chartered, I'd open the indicator box --

MR. HOWELLS: Yes?

THIRD ENGINEER BALAUBRAMANIAM: With me, fourth engineer would be there, open indicator box, and then give a signal from the bow, we get up from there, and then go and give a signal okay, turn the engine. At that time, we proceed the indicator (indiscernible) any water or anything is coming in, the tracking is proper for the sound, and it's okay then, he gives a --

MR. HOWELLS: Thumbs up?

THIRD ENGINEER BALAUBRAMANIAM: Yeah, and we close the indicator box, and again, we say okay, we are ready. At that time we, before starting, and starting, we see the (indiscernible) smoking, and told (indiscernible) also some time we there pull the pipes and see whether it is (indiscernible) we are filling the (indiscernible) mark. Also, you check any leakage, portal leakage. Go around the (indiscernible) look for any leakages (indiscernible) things okay.

MR. HOWELLS: How to open and close the (indiscernible)?

THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible). It is a normal -- wheel is there.

MR. HOWELLS: A normal wheel?

THIRD ENGINEER BALAUBRAMANIAM: Yeah, (indiscernible).

MR. HOWELLS: You don't have to use a wrench or anything?

THIRD ENGINEER BALAUBRAMANIAM: No, (indiscernible) and we have a blank on top.

MR. HOWELLS: Okay.

THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible).

MR. HOWELLS: Do you know what kind of material the liners are made out of?

THIRD ENGINEER BALAUBRAMANIAM: No.

MR. HOWELLS: Does this vessel have a pre lube system? Pre lube the engine before you start it?

THIRD ENGINEER BALAUBRAMANIAM: Lubrication?

MR. HOWELL: Yes.

THIRD ENGINEER BALAUBRAMANIAM: The well pump is already -- do the running. Whenever the well put a fire out, and the well pump. (Indiscernible) first the lubricators (indiscernible). Before starting the engine, we always engage (indiscernible) turn the engine on our calibrations. Also, lubricate the liners (indiscernible) the -- by pressing the lubricators.

MR. HOWELL: Were you involved in the work on the number one cylinder, number one unit in Seattle?

THIRD ENGINEER BALAUBRAMANIAM: Yes.

MR. HOWELLS: Was there much of a carbon deposit on those rings on that piston?

THIRD ENGINEER BALAUBRAMANIAM: Not much.

MR. HOWELLS: Not much? What color was it?

THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible).

MR. HOWELLS: Was it like a chocolate brown, a charcoal black?

THIRD ENGINEER BALAUBRAMANIAM: Of all the rings, (indiscernible) I just -- like a light grayish

MR. HOWELLS: Light gray?

THIRD ENGINEER BALAUBRAMANIAM: Yeah, off white.

MR. HOWELLS: Off white?

THIRD ENGINEER BALAUBRAMANIAM: Ash (indiscernible), and on the rims it is slightly blackish. (Indiscernible). Stubborn, stubborn (indiscernible).

MR. HOWELLS: Can you tell me about the sea water system for the main engine, the sea suctions, where they're at, which ones you use, and how many there are?

THIRD ENGINEER BALAUBRAMANIAM: We have a high and low seawater system, as a sea suction. I think exactly here I can -- I never do (indiscernible) collectors, it's too closely to the (indiscernible) one (indiscernible).

MR. HOWELLS: Okay.

THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible) seawater went to (indiscernible)head, then (indiscernible)

cooler, then small boat.

MR. HOWELLS: Do you know which ones were open on that day, the 6th?

THIRD ENGINEER BALAUBRAMANIAM: The (indiscernible) the Seattle (indiscernible). After that we have changed over to low sea chest.

MR. HOWELLS: Low sea chest?

THIRD ENGINEER BALAUBRAMANIAM: Yeah.

MR. HOWELLS: Do you know if anyone checked the lube oil in the sump of the main engine on the 6th?

THIRD ENGINEER BALAUBRAMANIAM: The well sump (indiscernible).

MR. HOWELLS: The dip stick. Pull the dip stick, look at it?

THIRD ENGINEER BALAUBRAMANIAM: Managing lube oil, we have some (indiscernible) or something.

MR. HOWELLS: Okay, yes, now that's what I'm saying. Did anyone sound it?

THIRD ENGINEER BALAUBRAMANIAM: Yeah, it has to be checked. The level has to be checked (indiscernible).

MR. HOWELLS: Was the level okay?

THIRD ENGINEER BALAUBRAMANIAM: Yeah.

MR. HOWELLS: Was it the right color?

THIRD ENGINEER BALAUBRAMANIAM: Color? This oil is a used oil. It is okay. The color is okay.

MR. HOWELLS: Was it milky?
THIRD ENGINEER BALAUBRAMANIAM: No, no milky.
MR. HOWELLS: Okay.
THIRD ENGINEER BALAUBRAMANIAM: It is oily.
MR. HOWELLS: Okay.
THIRD ENGINEER BALAUBRAMANIAM: Like a used oil.
MR. HOWELLS: That's good. When you are in the operation of starting the main engine, did the chief and the second engineer seem comfortable with that process?
THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible) asked (indiscernible) make the departure Seattle or --
MR. HOWELLS: Yes, departure Seattle.
THIRD ENGINEER BALAUBRAMANIAM: -- on the 6th. Departure Seattle, very smooth.
MR. HOWELLS: Very smooth?
THIRD ENGINEER BALAUBRAMANIAM: Yeah.
MR. HOWELLS: How about on the 6th?
THIRD ENGINEER BALAUBRAMANIAM: Sixth, the engine is not getting started. We're worried and sitting in (indiscernible) coming down, and sitting in (indiscernible) of the fuel (indiscernible). We were -- we all were very dizzy, and worried why the engine is not starting.
MR. HOWELLS: If your best friend was going to get underway on the ship just like that and you knew this was going to happen, what would you tell your friend? Make sure

you check this. Is there anything that you would be sure to tell your friend to watch out for?

THIRD ENGINEER BALAUBRAMANIAM: I would -- first of all, I would suggest in case this kind of a problem, first fire of engine starting should be only cut off the fuel, and try it. That is in the first (indiscernible), and if everything is all right, the fuel pressure, temperature, and (indiscernible) moving, then go ahead for checking the (indiscernible) space.

What is (indiscernible) of them is, like that one is -- that part has held this pretty much that at least we can crank up. The fuel spray is there on the piston (indiscernible), and one -- well, we are failed to -- we are failing to start. We have tried to start, and so for -- keep trying to starting, and go ahead for opening of the -- on the piston space, inspection door, and check whether the fuel is sprayed onto that in wetness of --

MR. HOWELLS: Sure.

THIRD ENGINEER BALAUBRAMANIAM: -- (indiscernible) that will help a lot. Then, at sea, (indiscernible) start pulling out the piston, and have it out of (indiscernible) compression (indiscernible). Piston rings, rope, and whatever the case. Instead of pulling out the piston, it's better to go in directly for to change the rings. Lift up, put the blocks underneath the crown, and take out the hook

and everything. Change the rings, and (indiscernible). That will be faster if we (indiscernible) in neutral, not (indiscernible) near the (indiscernible).

MR. HOWELLS: That's all I have.

MR. CURTIS: Brian Curtis again. Mutha, you picked the piston up that's what you did, you put the blocking under it, correct?

THIRD ENGINEER BALAUBRAMANIAM: I --

MR. CURTIS: Captain Lew just entered the room. You picked the piston up. You never took the piston out, you only blocked it and left it right there, right?

THIRD ENGINEER BALAUBRAMANIAM: Yeah.

MR. CURTIS: After you did all these steps the first time, and isolated everything, were you trying to light it on heavy oil or diesel oil at that time?

THIRD ENGINEER BALAUBRAMANIAM: The (indiscernible) bring on diesel oil. After that (indiscernible) heavy oil.

MR. CURTIS: So, the first time you tried it with diesel oil?

THIRD ENGINEER BALAUBRAMANIAM: Then failed to start (indiscernible) both times --

MR. CURTIS: Right.

THIRD ENGINEER BALAUBRAMANIAM: -- and the second engineer said (indiscernible) heavy oil, better spray on

heavy oil. Then also, it came to stop.

MR. CURTIS: How many times do you estimate that you tried to start it that it didn't start? How many kicks did you give it? Roughly?

THIRD ENGINEER BALAUBRAMANIAM: Roughly about maybe seven kicks, and the pressure is to drop from 29 to 10 or 8 then the stop, then mid of air (indiscernible).

MR. CURTIS: How many ships have you worked on total, roughly?

THIRD ENGINEER BALAUBRAMANIAM: Before (indiscernible) was there and then maybe for 15 years.

MR. CURTIS: So, you've on a lot of ships?

THIRD ENGINEER BALAUBRAMANIAM: I have, and I worked for them, five ships.

MR. CURTIS: When you compare this engine room to all the other ships you worked on, how do you rate this engine room for cleanliness, how it's being run, and how did you rate the operation?

THIRD ENGINEER BALAUBRAMANIAM: It's well maintained (indiscernible).

MR. CURTIS: Good?

THIRD ENGINEER BALAUBRAMANIAM: Machinery wise, control wise, I don't (indiscernible), cleanliness, well maintained.

MR. CURTIS: Did you have any problems or

complaints for the engine room, the way it was run, or any of the equipment, or the record keeping, any complaints?

THIRD ENGINEER BALAUBRAMANIAM: No complaints.

MR. CURTIS: No complaints?

THIRD ENGINEER BALAUBRAMANIAM: They're happy. Even the -- when we were on the helicopter, I was thinking that next day maybe we go back and try it if it is not drifting off. I was hoping to go back (indiscernible), and start at go. It was --

MR. CURTIS: Not to be. Anything else, Darrell?

MR. HOWELLS: (Indiscernible.)

MR. CURTIS: Captain Lew, do you have any questions?

CAPTAIN LEW KWOK YUE: Sorry, I wouldn't have any.

MR. CURTIS: I guess that's it, Mutha. It's now roughly 16:25, and we thank you for your time today, and this concludes your interview.

THIRD ENGINEER BALAUBRAMANIAM: Thank you.

(Whereupon, at 4:25 p.m., the interview was concluded.)

C E R T I F I C A T E

DEPOSITION SERVICES, INC., hereby certifies that the attached pages represent an accurate transcript of the electronic sound recording of the proceedings of the National Transportation Safety Board Interview regarding the grounding of the Selendang Ayu on December 9, 2004.

INTERVIEW OF THIRD ENGINEER:
MUTHA BALAUBRAMANIAM

Eve Jemison, Transcriber